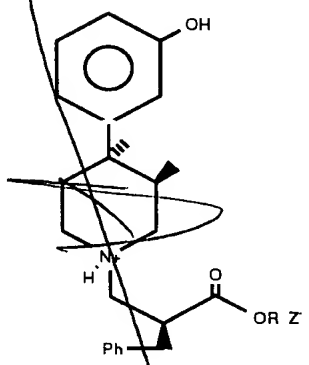
We Claim:

1. Crystalline compounds of the Formula 2

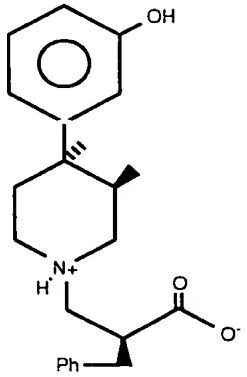


(2)

wherein R is C_1-C_6 alkyl; Z^- is selected from the group consisting of hydrochloride, hydrobromide, succinate, and (+)-dibenzoyltartrate.

2. The compound of **Claim 1** wherein Z^- is hydrochloride and R is methyl.

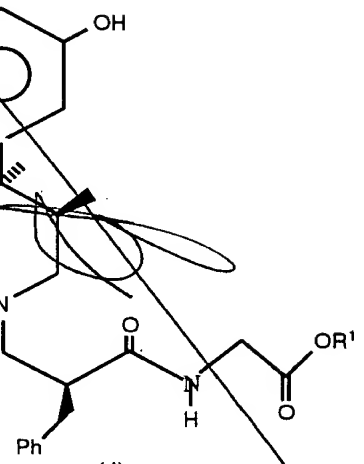
17 3. A process for preparing a crystalline monohydrate compound of Formula **3**



(3)

comprising the crystallization of **3** from a solvent comprised of about 50% ~~lower alcohol~~ methanol ~~to 75% lower alcohol~~ and about 50% ~~to 25%~~ water (by weight).

4. A crystalline compound of the Formula **4**



(4)

wherein R^1 is C_1-C_6 alkyl; the compound is a salt selected from the group consisting of hydrochloride acetone monosolvate, malate (1:1), and sesquimalate (3:2).

4~~5~~. A crystalline compound of **Claim 4** wherein the compound of Formula ~~4~~ is (2S,3R,4R)[[2-[[4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl]-1-oxo-3-phenylpropyl]amino]acetic acid 2-methylpropyl ester.

~~6~~. A crystalline compound of **Claim 4** wherein the salt is the hydrochloride acetone monosolvate.

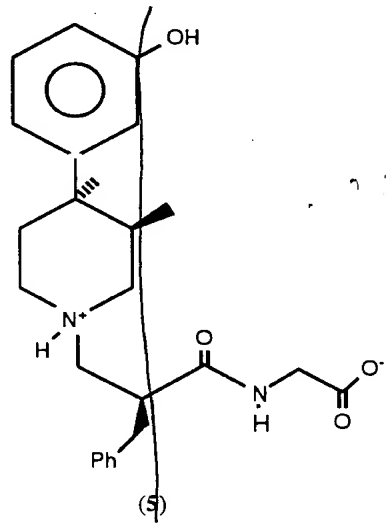
5~~7~~. A crystalline compound of Claim ~~6~~ wherein the compound is (2S,3R,4R)[[2-[[4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl]-1-oxo-3-phenylpropyl]-amino]acetic acid 2-methylpropyl ester hydrochloride acetone monosolvate.

~~8~~. A crystalline compound of **Claim 4** wherein the salt is sesquimalate.

6~~8~~. A crystalline compound of **Claim ~~8~~** wherein the compound is (2S,3R,4R)[[2-[[4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl]-1-oxo-3-phenylpropyl]-amino]acetic acid 2-methylpropyl ester.

7~~10~~. A crystalline compound of **Claim 4** wherein the compound is (2S,3R,4R)[[2-[[4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl]-1-oxo-3-phenylpropyl]-amino]acetic acid 2-methylpropyl ester malate.

8 ~~11~~. A crystalline dihydrate compound of the Formula **5**



9 ~~12~~. A compound of **Claim** ~~11~~ 8 wherein the crystalline dihydrate compound is at least 97% (2S,3R,4R)dihydrate.

10 ~~13~~. A method for binding a peripheral opioid receptor in a patient which comprises administering to said patient an effective amount of a compound of **Claim** ~~1~~ 1.

11 ~~14~~. A method for binding a peripheral opioid receptor in a patient which comprises administering to said patient an effective amount of a compound of **Claim** ~~11~~ 8.

12 ~~15~~. A method for treating a condition selected from the group consisting of irritable bowel syndrome, idiopathic constipation, and non-ulcer dyspepsia; comprising administering an effective amount of a compound of **Claim** ~~1~~ 1.

13 ~~16~~. A method for treating a condition selected from the group consisting of irritable bowel syndrome, idiopathic constipation, and non-ulcer dyspepsia; comprising administering an effective amount of a compound of **Claim** ~~11~~ 8.

14 ~~17~~. A pharmaceutical formulation comprising an effective amount of a compound of **Claim** ~~1~~ 1 in combination with one or more pharmaceutically acceptable excipients.

15 ~~18~~. A pharmaceutical formulation comprising an effective amount of a compound of **Claim ~~11~~** 8 in combination with one or more pharmaceutically acceptable excipients.

16 ~~19~~. A formulation of **Claim ~~18~~** 15 wherein the formulation is a hard gelatin capsule.

add B2